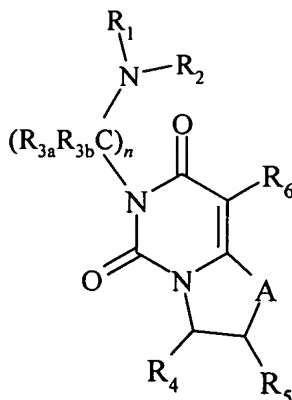


CLAIMS

We claim:

1. A compound having the following structure:



or a stereoisomer, prodrug or pharmaceutically acceptable salt thereof,

wherein:

A is O, S, $-\text{OCR}_7\text{R}_8-$, or NR_7 ;

n is 2, 3 or 4;

R_1 and R_2 are the same or different and independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl, substituted heterocyclealkyl, $-\text{C}(\text{R}_8)(=\text{NR}_9)$ or $-\text{C}(\text{NR}_{10}\text{R}_{11})(=\text{NR}_9)$;

or R_1 and R_2 taken together with the nitrogen atom to which they are attached form a heterocycle or a substituted heterocycle;

R_{3a} and R_{3b} are the same or different and, at each occurrence, independently hydrogen, alkyl, substituted alkyl, alkoxy, alkylthio, alkylamino, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl, substituted heterocyclealkyl, $-\text{COOR}_{12}$ or $-\text{CONR}_{10}\text{R}_{11}$;

or R_{3a} and R_{3b} taken together with the carbon atom to which they are attached form a homocycle substituted homocycle, heterocycle or substituted heterocycle;

or R_{3a} and the carbon to which it is attached taken together with R₁ and the nitrogen to which it is attached form a heterocycle or substituted heterocycle;

R₄ is aryl, substituted aryl, arylalkyl, substituted arylalkyl, heteroaryl, substituted heteroaryl, heteroarylalkyl or substituted heteroarylalkyl;

R₅ is hydrogen, alkyl, or substituted alkyl;

R₆ is aryl, substituted aryl, heteroaryl, or substituted heteroaryl;

R₇ is hydrogen, alkyl, substituted alkyl;

R₈ is independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl or substituted heterocyclealkyl;

R₉ is independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl or substituted heterocyclealkyl;

R₁₀ and R₁₁ are the same or different independently hydrogen, alkyl, substituted alkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl or substituted heterocyclealkyl; and

R₁₂ is hydrogen, alkyl, or substituted alkyl.

2. The compound of claim 1 wherein R₁ is hydrogen, alkyl, substituted alkyl, arylalkyl, substituted arylalkyl, heterocyclealkyl or substituted heterocyclealkyl.

3. The compound of claim 1 wherein R₄ is aryl, substituted aryl, arylalkyl, substituted arylalkyl, heteroaryl, heteroarylalkyl or substituted heteroarylalkyl.

4. The compound of claim 1 wherein R₆ is substituted aryl, heteroaryl, or substituted heteroaryl.

5. A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier or diluent.

6. A method for antagonizing gonadotropin-releasing hormone in a subject in need thereof, comprising administering to the subject an effective amount of a compound of claim 1.

7. A method for treating a sex-hormone related condition of a subject in need thereof, comprising administering to the subject an effective amount of the pharmaceutical composition of claim 5.

8. The method of claim 7 wherein the sex-hormone related condition is cancer, benign prostatic hypertrophy or myoma of the uterus.

9. The method of claim 8 wherein the cancer is prostatic cancer, uterine cancer, breast cancer or pituitary gonadotroph adenomas.

10. The method of claim 7 wherein the sex-hormone related condition is endometriosis, polycystic ovarian disease, uterine fibroids or precocious puberty.

11. A method for preventing pregnancy of a subject in need thereof, comprising administering an effective amount of the pharmaceutical composition of claim 5.

12. A method for treating lupus erythematosus, irritable bowel syndrome, premenstrual syndrome, hirsutism, short stature or sleep disorders of a subject in need thereof, comprising administering to the subject an effective amount of the pharmaceutical composition of claim 5.